

C3 Series - C350/C357 Data Sheet



- 50.8mm/ 2in LCD display with RGB backlight
 - RGB backlight to make check weighing easy.
 - Wide DC operation (5-24V) ideal for onboard vehicle applications.
 - C350 Resin alloy full housing IP66, IP68 and NEMA 4
 - C357 Stainless steel full housing IP66, IP68, IP69K and NEMA 4X
 - NTEP/ OIML/ NMI/ approved
- The C350 resin alloy full housing indicator and C357 stainless steel full housing indicators are the latest versions of Rinstrum's C300 series. These features a 50.8mm/ 2" LCD display with RGB backlight together with flush polyester overlay with mechanical keys. These are fully sealed and have durable chemical resistance. Custom printing, accumulation and latching set points are some of the available features amongst the various firmware applications.
- C350 and C357 are built with two RS232 bidirectional serial ports independently configurable for network, printing, or remote display functions and two accessory card slots for increased functionality. The communication cards offer increased options and expansion cards cover additional functions.
- **50.8mm (2in) LCD display with RGB backlight:** to improve visibility and readability of the weight display and RGB backlight for easy check weighing applications.
 - **Wide DC operation (5-24V):** to suit a variety of onboard vehicle and industrial applications.
 - **Two RS232 bidirectional serial ports:** independently configurable for network, printing or remote display functions.
 - **Inputs and Outputs:** Four digital inputs and four high-side digital outputs that are electrically isolated. Outputs are capable of driving low voltage DC actuators directly
 - **Onboard data storage:** compliant to WELMEC 7.2 (alibi memory DSD)
 - **rinLINK:** magnetically coupled link on front fascia for easy access in situ for updates/setup of the indicator, saving the installer time and effort.
 - **Flush polyester overlay with mechanical keys:** no membrane key to wear out, easy to keep clean, fully sealed, durable chemical resistance, improves uv resistance.
 - **Printing:** Multiple standard print dockets through to fully programmable print formats that can be easily created with the drag and drop configuration tool rinPRINT.

Advanced Setpoints

The C3 instrument supports up to 8 setpoints with 4 Inputs & 4 Outputs directly linked to the setpoints mapping. Setpoint status can be used to drive the onboard outputs directly, sound the buzzer, change display backlight colour or can be transferred to external control systems using modbus RTU or through field bus expansion. Setpoint functions include:

- Weigh-in/Weigh-out filling
- CHECKWEIGH: OVER, UNDER, PASS
- Status (motion, zero, net)

Setpoint outputs can be latched and reset from remote inputs or external control.

Accessory Cards

Optional accessory cards can be connected using the Accessory port to add more functionality to the C320 indicator.

Communication cards

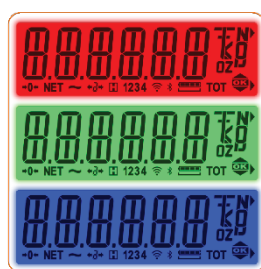
- C3 Series RS232 Communications card - M6201
- C3 Series RS485 Communications card - M6203
- C3 Series 20 mA Current Loop Communications card - M6204

Expansion Cards

- C3 Analogue Output card - M6401 (K306 only)

Accessory card

- C3 Series Converter 0-10V/4-20mA Input (M4902)



RGB LCD Display
(Selectable up to 9 colours)

Smart Weighing

Large LCD display (50.8mm/ 2") with RGB backlight of the C350/C357 indicator improve visibility and readability of the weight display.

The C350/C357's bright, vivid backlight changes color automatically as the pre-assigned target weights are reached.

The operator knows immediately when they've reached the acceptable weight range based on the orange, green, or red color changes for UNDER, ACCEPT, or OVER weights.

... now that's smart weighing!

Specifications

General						
Trade Approval		NTEP 23-090 / NMI S869 / OIML R76-1 (2006)				
Resolution		Up to 100,000 divisions, minimum of 0.1uV/division Trade: Up to 10,000 divisions, minimum of 0.33uV/division				
Zero Cancellation		± 2.0mV/V				
Span Adjustment		0.1mV/V to 5.0mV/V full scale				
Excitation		5V for up to 8 x 350-ohm load cells (4-wire or 6-wire plus shield) Max total load cell resistance: 3,500Ω				
A/D Type		24bit Sigma Delta with 8,388,608 internal counts, 50 updates/second				
Operating Environment		Temperature: -10° to +50°C ambient (14° to 122° F), Humidity: <90% non-condensing				
Setup and Calibration		Fully digital with visual prompting in plain messages				
Digital Filter		IIR low pass filter				
Zero Range		Selectable from ± 2% to ± 100% Full Scale				
Standard Power Input		5 to 24VDC (2.5 VA max) ON/OFF key with memory feature				
Optical Data Communications		rinLINK - magnetically coupled infra-red communications Conversion cables available for USB				
Keys US Region		Power/ Zero/ Tare/ Select/ Units Switching (lb/ kg/ oz/ g/ t/ TN/ lb:oz/custom) plus two assignable function keys				
Keys ROW Region		Power/ Zero/ Tare/ Select plus three assignable function keys				
Accessory Cards						
Communications cards		RS485, RS232, Current loop				
Expansion Cards (K306 Only)		0-10V, 4-20mA, isolated 16 bit analogue output				
		C320		C350		C357
Display		RGB Backlit LCD with six 20mm (0.8") high digits with units and annunciators, 9 segment		RGB Backlit LCD with six 50.8mm (2") high digits with units and annunciators, 9 segment		
Case Materials		Resin Alloy		Resin Alloy		Stainless Steel
		C320-A	C320-G	C320-H	C350	C357
AC 110-240 VAC		Optional plug pack	-	Wired cable gland with plug pack	Cable gland with AC line cord	Potted AC Line Cord
DC	5-24 VDC	Rear connector	Barrel connector with plug pack	-	Cable gland without cord	3 pin LTW connector
	Battery	4 x AA battery option	4 x AA batteries	-	-	-
IP Rating		IP65 when panel mounted	-	IP55 full housing	IP66, IP68, NEMA4	IP66, IP68, IP69K, NEMA 4X
Packing Weights		0.25kg/ 9oz	0.42kg/ 14.8oz		3.8kg/ 8.4lbs	5.5kg/ 12.1lbs

Specifications may change at any time without notice.

Firmware Variants

Firmware Version		Standalone (K301)	All round (K304)	Advanced (K306)
Function Keys	Hold	Manual	+Peak	+Peak
	Counting	-	S	S
	Auto Tare	-	S	S
	Totalising	-	S	S
	Display Test	S	S	S
	High Res (x10)	S	S	S
Quick Calibration		S	S	S
Units Switching lb/ kg/ oz/ g / t/ TN/ lb:oz/custom (switching between up to three units plus counting)		S	S	S
Multiple Tare (enhanced)		S	S	S
Medical hold		-	S	S
Multi color backlight		-	S	S
QA Date		-	S	S
mV/V Calibration		-	S	S
Clock Calendar		-	S	S
Remote Inputs		-	2	2
Isolated Outputs		-	2	2
Custom AUTO/SINGLE Output		S	S	S
Ring Network rinCMD		A	S	S
SIMPLE Network emulation		-	S	S
Printing		-	Programmable	
RS232 onboard		-	2	2
Extra Serial Port(%) – Card (#) RS232, RS485, 20mA LOOP		A	A	A
Livestock Weighing		S	S	S
Gravity Compensation		S	S	S
Linearisation		S	S	S
Mimic Mode		-	S	S
Check Weighing (RGB Backlight)		-	S	S
Set Points		-	Basic (8)	Adv (8)
Analogue Output Card		-	-	A
Alibi WELMEC 7.2 (DSD)		-	S	S
Programmable DSD CSV Log (#)		-	-	S
Bluetooth/WIFI (*)		A	A	A
Li-ion battery (*)		A	A	A

S - Standard Accessory

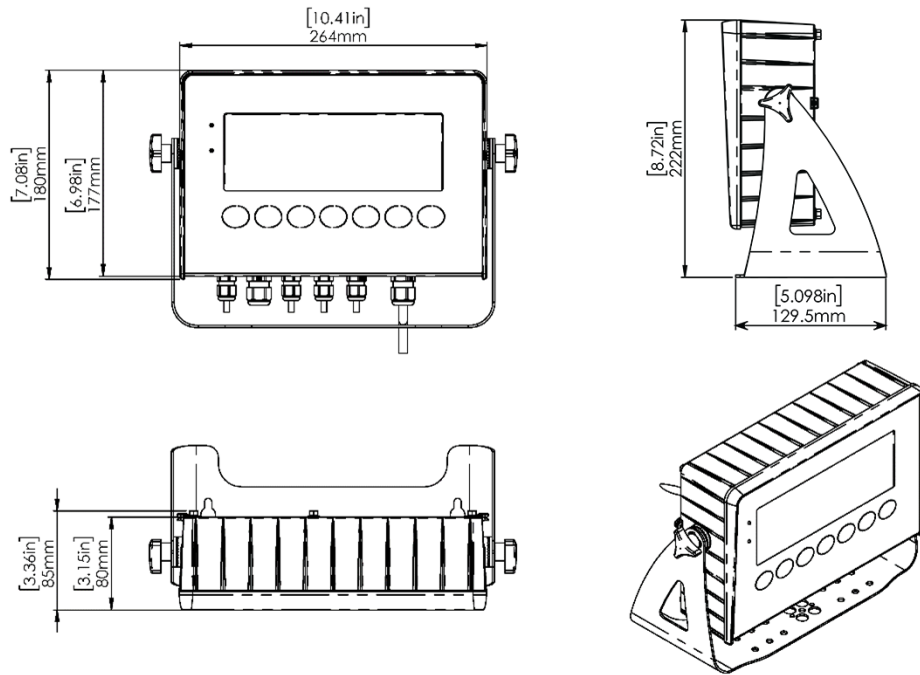
A - Optional Accessory

(*) - Accessory under development

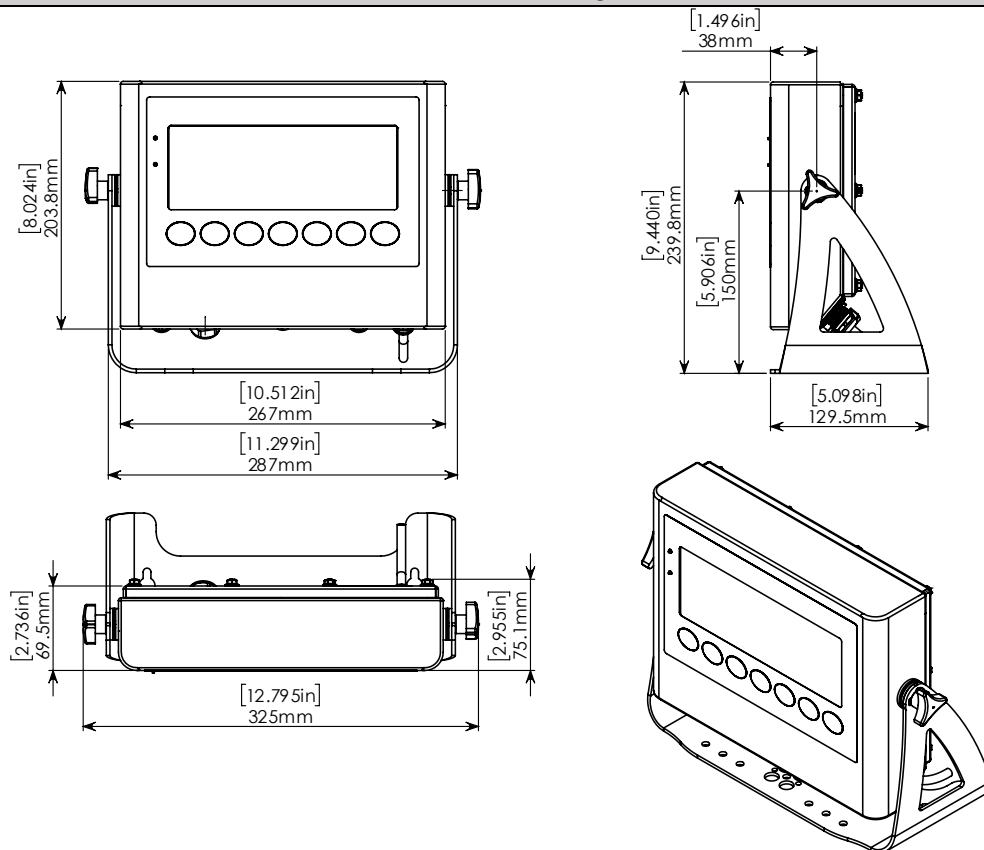
(#) - Readable via the registers

(%) - Can be used to extend the capability of K301 Firmware with added comms

C350 resin alloy full housing indicator



C357 stainless steel full housing indicators



Specifications are subject to variation for improvement without notice. Illustrations are indications only and variation may be evident between products.